

AMENDMENTS TO THE CLAIMS

Listing of Claims

1. (Previously Presented) In a wireless communications receiver having a timing recovery module, carrier recovery module, automatic gain control module, and equalization module, said communications receiver responsive to a received signal to form soft decision samples corresponding to said received signal and hard decision samples corresponding to said received signal, a method for jointly operating said timing recovery module, said carrier recovery module, said automatic gain control module, and said equalization module, said method comprising:

deriving control signals from said soft and hard decision samples, wherein the control signals comprise a candidate error term and a combining weight; and

using said control signals to jointly determine operation of said timing recovery module, said carrier recovery module, said automatic gain control module, and said equalization module.

2. (Cancelled)

3. (Previously Presented) The method of claim 1, wherein the received signal comprises data, the method further comprising:

adjusting a sampling phase and frequency of the data.

4. (New) The method of claim 1, further comprising:

determining the combining weight by comparing the soft decision sample to a nearest element in a source constellation.